

In the Claims:

~~Please cancel claims 3, 5-11, and 14 without prejudice.~~

Please amend claims 1, 4, 15, 16, and 20 to read as follows:

C1
1. (Amended) A multi-domain fusion protein expression cassette, comprising a promoter operably linked to a nucleic acid molecule which is expressed as an insoluble protein, wherein said nucleic acid molecule encodes a polypeptide comprising the structure (cationic peptide)-[(cleavage site)-(cationic peptide)]_n, wherein *n* is an integer having a value between one and four and at least one cationic peptide has antimicrobial activity.

C2
4. (Amended) The expression cassette according to any one of claims 1 or 2 wherein said cleavage site can be cleaved by low pH or by a reagent selected from the group consisting of cyanogen bromide, N-chlorosuccinimide, 2-(2-nitrophenylsulphenyl)-3-methyl-3'-bromoindolenine, hydroxylamine, *o*-iodosobenzoic acid, Factor Xa, Factor XIIIa, thrombin, enterokinase, collagenase, *Staphylococcus aureus* V8 protease, endoproteinase Arg-C, endoproteinase Glu-C, endoproteinase Lys-C, and trypsin.

C3
15. (Amended) The expression cassette according to any one of claims 1 or 2 wherein said promoter is selected from the group consisting of *lacP* promoter, *tacP* promoter, *trcP* promoter, *srpP* promoter, SP6 promoter, T7 promoter, *araP* promoter, *trpP* promoter, and λ promoter.

16. (Amended) A recombinant host cell comprising the expression cassette according to any one of claims 1, 2, 12, or 13.

C4
20. (Amended) A method of producing fusion proteins that contain a cationic peptide, comprising culturing the recombinant host cell of claim 16 under conditions and for a time sufficient to produce said fusion protein.

Please add new claims 29-53 to read as follows:

9/03/1
29. (New) A multi-domain fusion protein expression cassette, comprising a promoter operably linked to a nucleic acid molecule that is expressed as an insoluble protein, wherein the nucleic acid molecule encodes a fusion protein comprising (a) a carrier amino acid sequence, (b) an anionic spacer peptide, (c) at least two cationic peptides wherein at least one cationic peptide has antimicrobial activity, and (d) at least two cleavage sites wherein at least one cleavage site is between the cationic peptide and the carrier and at least one cleavage site is between the cationic peptide and the spacer, wherein the encoded fusion protein comprises the structure (carrier amino acid sequence)-[(cationic peptide)-(anionic spacer peptide)]_n-(cationic peptide) with *n* being an integer having a value between 1 and 100.

30. (New) The expression cassette according to claim 29 further comprising at least one additional C-terminal anionic spacer peptide.

31. (New) The expression cassette according to claim 29 wherein the promoter is selected from the group consisting of *lacP* promoter, *tacP* promoter, *trcP* promoter, *srpP* promoter, SP6 promoter, T7 promoter, *araP* promoter, *trpP* promoter, and λ promoter.

9/04/1
32. (New) The expression cassette according to claim 29 wherein the carrier is selected from cellulose binding domain, glutathione-S-transferase, outer membrane protein F, β -galactosidase, protein A, or IgG-binding domain.

33. (New) The expression cassette of claim 29 wherein the carrier is located at the N-terminus of the fusion protein.

34. (New) The expression cassette of claim 29 wherein the carrier is located at the C-terminus of the fusion protein.

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35. (New) The expression cassette according to claim 29 wherein the carrier is less than 100 amino acid residues in length.

36. (New) The expression cassette according to claim 35 wherein the carrier is a truncated cellulose binding domain.

37. (New) The expression cassette according to claim 29 wherein the anionic spacer has no cysteine residue.

38. (New) The expression cassette according to claim 29 wherein the number of anionic spacer peptides is greater than or the same as the number of cationic peptides.

39. (New) The expression cassette according to claim 29 wherein the number of anionic spacer peptides is less than the number of cationic peptides.

40. (New) The expression cassette according to claim 29 wherein the cumulative charge of the anionic spacer peptide reduces the cumulative charge of the cationic peptide.

41. (New) The expression cassette according to claim 29 wherein the fusion protein comprises from 2 to 40 cationic peptides.

42. (New) The expression cassette according to claim 29 wherein the fusion protein comprises from 2 to 20 cationic peptides.

43. (New) The expression cassette according to claim 29 wherein the cationic peptide is an indolicidin or analog thereof.

44. (New) The expression cassette according to claim 43 wherein the indolicidin or analog thereof is an indolicidin analog of up to 35 amino acids that comprises the sequence of I L K K W P W W P W R R K or I L R W P W W P W R R K.

45. (New) The expression cassette according to claim 29 wherein the cleavage site can be cleaved by low pH or by a reagent selected from cyanogen bromide, N-

chlorosuccinimide, 2-(2-nitrophenylsulphenyl)-3-methyl-3'-bromoindolenine, hydroxylamine, *o*-iodosobenzoic acid, Factor Xa, Factor XIIa, thrombin, enterokinase, collagenase, *Staphylococcus aureus* V8 protease, endoproteinase Glu-C, endoproteinase Arg-C, endoproteinase Lys-C, chymotrypsin, trypsin, or a combination thereof.

46. (New) The expression cassette according to claim 29 wherein the cleavage site is with the carrier amino acid sequence, anionic spacer peptide, cationic peptide, or a combination thereof.

47. (New) A recombinant host cell comprising the expression cassette according to any one of claims 29-46.

48. (New) The recombinant host cell of claim 47 wherein the host cell is a yeast, a fungus, a bacteria or a plant cell.

49. (New) The recombinant host cell of claim 48 wherein the bacteria is *Escherichia coli*.

50. (New) A method of producing fusion proteins that contain a cationic peptide, comprising culturing the recombinant host cell of claim 47 under conditions and for a time sufficient to produce the fusion protein.

51. (New) The expression cassette according to any one of claims 1, 2, 29, or 30 wherein the expression cassette is contained in an expression vector.

52. (New) The recombinant host cell of claim 16 wherein the expression cassette is contained in an expression vector.

53. (New) The recombinant host cell of claim 47 wherein the expression cassette is contained in an expression vector.